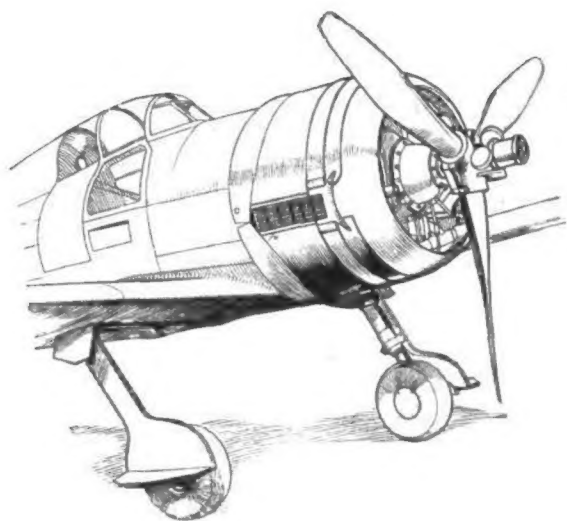


Few more fitting names could have been chosen for the small Aquila-engined Vickers fighter than "Venom." The sketch on the right shows details of its engine installation, cockpit enclosure and electrically operated retractable undercarriage.



recent times. Built to meet Air Ministry Specification B.9/32 it is a mid-wing cantilever monoplane of stressed-skin metal construction embodying such modern aids to performance as Handley Page slots and flaps and variable-pitch airscrews. The forward portion of the fuselage is exceptionally narrow and deep and houses three gun positions—in the nose, at the lower rear extremity of the box-like forward portion and on top of the fuselage in the plane of the trailing edge. Aft of the rear gun positions the fuselage becomes extremely small in cross section, and in conjunction with the twin-rudder arrangement of the tail gives a very excellent field of fire.

The Harrow heavy bomber is the company's most recent product, the first photographs appearing in this issue. Designed for carrying heavy loads over long distances it is equipped with advanced forms of armament installations. Apart from its functions as a heavy bomber the Harrow has been planned with a view to operating as a troop carrier. There are gun turrets in the nose and tail and amidships.

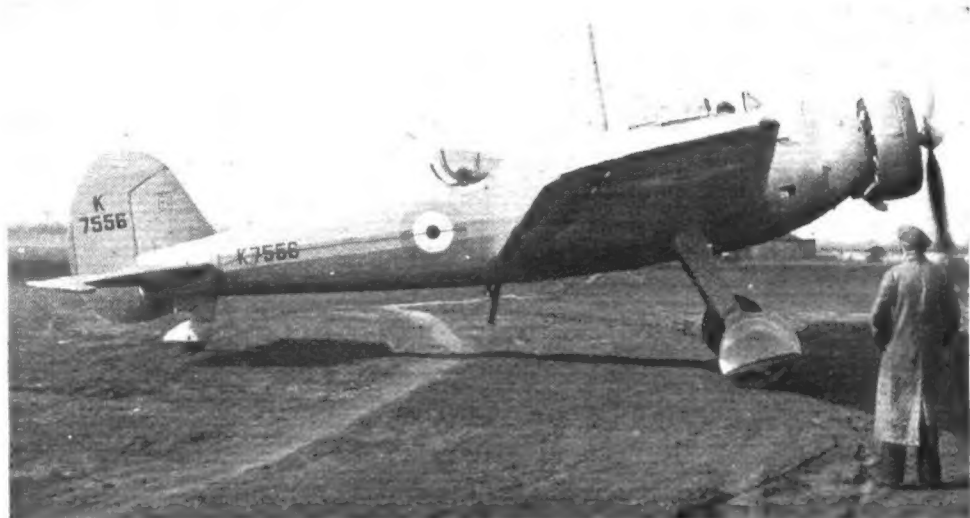
The installation of Handley Page slots, flaps and of variable-pitch airscrews on the Bristol Pegasus engines enables the machine to operate with heavy loads from small aerodromes. Of metal construction, the Harrow has fabric and metal covering.

Being designed as a high-wing monoplane certain difficulties would present themselves were the undercarriage made retractable, so, instead, the makers have fitted a clean fixed type of landing gear.

Performance trials have given results far beyond the expectations of the technical staff responsible for the design.

### HAWKER

ALTHOUGH single- and two-seater Hawker biplane types are still being built, interest naturally centres round the new Hurricane single-seater fighter, production orders for which



The first Vickers machine of full "geodetic" construction was the Wellesley monoplane, now powered with a 850 h.p. Bristol Pegasus X.

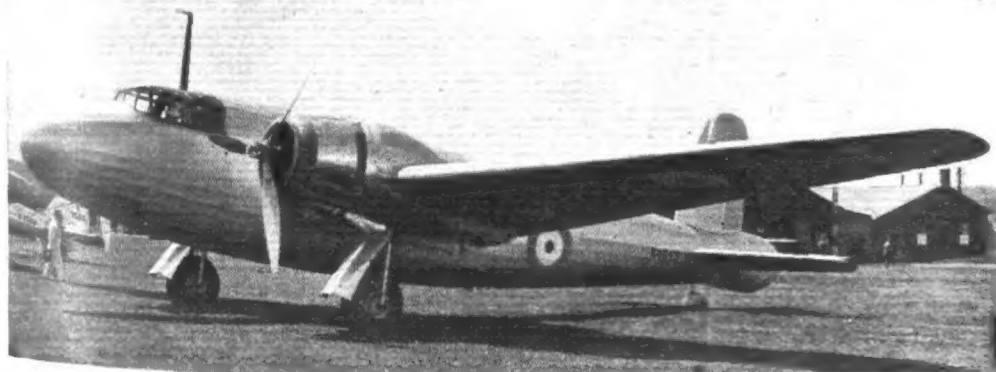
have been received from the Air Ministry under the R.A.F. Expansion Scheme.

The Hurricane comes within the "300 m.p.h. plus" category, and was built at the company's Kingston-on-Thames (Surrey) works to meet Air Ministry specification F.36/34. Details of armament, performance and construction are withheld, but it may be stated that the machine is of fairly conventional construction with fabric covering. The engine is a Rolls-Royce Merlin driving, in the prototype, a large two-bladed wooden airscrew. To add that the undercarriage is retractable, that flaps are fitted and that the pilot is completely enclosed seems almost superfluous in view of the extremely high performance.

The undercarriage is arranged to retract inboard into the cantilever wing, with a slight rearward motion, the wheel wells being covered during flight by panels moving with the wheels.

Landing lights are housed in the leading edge of the wing (this fact is significant in that no aeroplane which was not docile and without vice during landing would be adopted by the R.A.F. as a night-flying type) and the military equipment is believed to be very comprehensive.

The well-established Fury single-seater fighter biplane, as supplied to the R.A.F., has been developed during the past year; one particularly interesting model



A medium bomber of impressive appearance and performance, the first Vickers twin-engined "geodetic" monoplane has been adopted by the R.A.F. under the name Wellington.